

# The Mis-identification of the Major Antioxidant Flavonoids in Young Barley (*Hordeum vulgare*) Leaves

Kenneth R. Markham\* and Kevin A. Mitchell

Industrial Research Ltd., P. O. Box 31310, Lower Hutt, New Zealand.

E-mail: k.markham@irl.cri.nz; k.mitchell@irl.cri.nz

\* Author for correspondence and reprint requests

Z. Naturforsch. **58c**, 53–56 (2003); received July 22/August 16, 2002

Several papers have appeared in the literature since 1992 which refer to a major “isoflavonoid” antioxidant in young green barley leaves (*Hordeum vulgare*) as 2''-O-glucosylisovitexin. In the present paper the original NMR data supporting this structural assignment are examined and found to have been misinterpreted. HPLC and NMR data are used to prove that the major flavonoid antioxidants in *young* green barley leaves are in fact the flavone-C-glycosides, saponarin and lutoxin.

*Key words:* *Hordeum vulgare*, Flavonoid, Mis-identification